Amendments to the Claims:

1 – 14 (canceled)

15. (currently amended) A method for operating a metal strip mill train, comprising:

determining a desired flatness of the strip via a material flow model;

measuring an actual flatness of the metal strip near a discharge point of the mill train;

translating the measured metal strip flatness into flatness values;

controlling a roll stand of the mill train via a strip shape model providing a relationship between intrinsic flatness ip and visible flatness vp and that uses the desired and actual flatness values as inputs to reduce the difference between the actual flatness and the desired flatness of the metal strip.

16. (previously presented) The method as claimed in claim 15, wherein the actual flatness of the metal strip is measured at the discharge point of the mill train.

17. (previously presented) The method as claimed in claim 15, wherein the actual flatness is determined as a strip shape pattern.

18. (previously presented) The method as claimed in claim 17, wherein the strip shape pattern is three-dimensional.

19. (previously presented) The method as claimed in claim 18, wherein a relative length of individual tracks of the metal strip is evaluated to determine the strip shape pattern along with a variable of the individual tracks selected from the group consisting of: wavelength, amplitude and phase offset.

20. (previously presented) The method as claimed in claim 19, wherein a laser measuring device is used to determine the desired flatness of the metal strip.

21. (previously presented) The method as claimed in claim 20, wherein the laser measuring device is a multi-track laser measuring device.

22. (previously presented) The method as claimed in claim 20, wherein the actual flatness of the metal strip is measured topographically.

23. (previously presented) The method as claimed in claim 22, wherein the values for the desired flatness are translated into values for the actual flatness using the strip shape model.

24. (previously presented) The method as claimed in claim 23, wherein the flatness values are translated in real-time.

25. (previously presented) The method as claimed in claim 24, wherein, the flatness values are translated in real-time via an approximation function.

26. (previously presented) The method as claimed in claim 25, wherein the metal strip shape pattern based on the strip flatness is determined via the strip shape model by applying an assumed temperature distribution in the transverse direction of the metal strip.

27. (previously presented) The method as claimed in claim 26, wherein the actual flatness of the metal strip is measured by a laser measuring device.

28. (previously presented) The method as claimed in claim 27, wherein the laser measuring device is a multi-track laser measuring device.

29. (previously presented) The method as claimed in claim 27, wherein a flatness limit value is predefined at points to control the mill train.

30 - 33. (canceled)